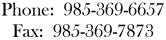


# Texas Brine Company, LLC 1301 Highway 70

Belle Rose, LA 70341





August 16, 2013

Commissioner James H. Welsh P.O. Box 94275 Baton Rouge, LA 70804

### RE: In response to State of Louisiana Department of Natural Resources Office of Conservation's Second Amendment to Declaration of Emergency and Directive

Commissioner Welsh,

In response to the Second Amendment and Declaration of Emergency and Directive order issued by the Louisiana Department of Natural Resources (LDNR), Office of Conservation on September 25, 2012, Texas Brine Company, LLC (TPC) understands the seven items listed in the document.

In the above mentioned, TBC was specifically directed and ordered to perform certain tasks outlined in the above mentioned document. Below are the required responses, as directed.

- 1. TBC's counsel provided LDNR legal counsel with a response to Directives 1-3 on September 28, 2012.
- 2. TBC understands Directive 4, which is to provide all daily logs and field notes from all contractors conducting investigation into subsidence and natural gas bubbling. The Daily Action Summary and results for current information can be found in the Attachment section of this report.
- 3. TBC understands Directive 5, which directs TBC to immediately allow for split or share any sample taken on site related to Well 3A (Serial Number 974265), the cavern, other wells facilities or other site locations. The Daily Action Summary of today's collection can be found in Attachment section of this report.
- 4. TBC understands Directive 6, which directs TBC to immediately report the results (final and preliminary) of any tests, logs samples or data collection performed on Well 3A, the cavern, other wells, facilities or site locations that indicate a change in any previously known conditions related to the investigation of the subsidence or natural gas bubbling

- events, and continue to report any such results. The Daily Action Summary and the Results related to this Directive can be found in Attachment section of this report.
- 5. TBC understands the Directive 7, which states that TBC will provide a daily summary of all tests, or logs performed or samples taken from Well 3A and the cavern as well as any results of those tests or logs, including preliminary as of September 25, 2012 and going forward. The Daily Summary and Results related to this Directive can be found in Attachment section of this report.

Please note that the drilling rig used for the Observation Well 3A has been removed and the site is being rigged down and returned to pre-drilling condition. As such, daily drilling reports for this well have ceased. Plans are being made for longer term potential gas venting/flaring requirements and possible hydrocarbon material recover from Well 3A.

In addition, previous daily summary reports issued to LDNR have included significant duplicate information as there is a fair amount of overlap in the information requested in each of the Directives included in the September 25, 2012 order. All requested information associated with the Directives issued in the September 25, 2012 order are included in the Attachment section of this report.

TBC believes that the submittal of this report satisfies the requirements of the Declaration of Emergency and Directive issued on September 25, 2012. As directed this report is submitted by email to <a href="mailto:conservationorder@la.gov">conservationorder@la.gov</a>, ref. "Emergency Declaration-Texas Brine Company LLC-9/25/2012.

Bruce E. Martin

Vice President, Operations

Bana EMart

Texas Brine Company, LLC



|            |  |                                       | TBC Oxy Gran   | nd Bayou Data Manage | ment-Enviro    | onmental         |                  |            |  |            |         |  |  |  |  |
|------------|--|---------------------------------------|--|----------------------|----------------|------------------|------------------|------------|--|------------|---------|--|--|--|--|
| Contractor | Responsibilities                             | Coll                                  | lected By  | Date Collect         | ed             | Delivered to Lab | Results from Lab | Laboratory | Method   | Date to Ag | gencies |  |  |  |  |
| Sage       | Stationary Air Monitoring                    | Darlene McManu                        | rjee - 08:10 - 09:30<br>is (Code Red) - 07:00 -<br>17:00                             | 8/15/201             | 3              | NA               | NA               | NA         | AreaRAE Monitors   | 8/16/2     | 013     |  |  |  |  |
|            | Residential Air Monitoring                   | bimonthly resident<br>Therefore, Sage | equested to suspend<br>ential air monitoring.<br>will discontinue these<br>tivities. | NA                   |                | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
|            | Gas Seep Sampling                            | No wor                                | k performed  | 8/15/201             | 3              | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
|            | Well Gas Sampling                            | Steve Shau                            | ighnessy - 07:24   | 8/15/201             | 3              | Yes              | No               | Isotech    | Isotopic   | upon rece  | eipt of |  |  |  |  |
|            | Under Slab Gas Sampling                      | No wor                                | k performed  | 8/15/2013            | 3              | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
|            | Indoor Air Monitoring                        | No wor                                | k performed  | 8/15/201             | 3              | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
| Respec     | Inclinometers/Tilt Meters/Transducers        | 8/15/2013                             | No work Conducted  | NA                   | NA             | NA               | NA               |            | NA NA  | NA         | NA      |  |  |  |  |
|            | InSAR Reflector Installations                | 8/15/2013                             | No work Conducted  | NA                   | NA             | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | Subsidence Survey-Fenstermaker               | 8/15/2013                             | No work Conducted  | NA                   | NA             | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | Shallow Geophone Installation                | 8/15/2013                             | No work Conducted  | NA                   | NA<br>NA<br>NA | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | Deep Geophone Installation                   | 8/15/2013                             | No work Conducted  | NA                   |                | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | Amendment #3, Directive #2                   | 8/15/2013                             | No work Conducted  | NA                   |                | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | Expansion of geoprobe gas sampling locations | 8/15/2013                             | No work Conducted  | NA                   | NA             | NA               | NA               |            | NA   | NA         |         |  |  |  |  |
|            | DPVE Pilot Test                              | 8/15/2013                             | No Work Conducted  | NA                   | NA             | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
|            | MIHPT  | 8/15/2013                             | No Work Conducted  | NA.                  | NA             | NA               | NA               |            | NA   | NA         | NA      |  |  |  |  |
| Miller     | Weekly Stability Survey                      | Kev                                   | in Pichoff   | August 15, 2         | 013            | NA               | NA               | NA         | NA NA  | NA         | _       |  |  |  |  |
|            | Misc. Survey Work                            |                                       | in Pichoff   | August 15, 2         |                | NA               | NA               | NA         | NA NA  | NA         |         |  |  |  |  |
|            | Sinkhole Hydro/Perimeter Survey              | _                                     | chel Sauce   | August 15, 2         |                | NA               | NA               | NA NA      |  |            |         |  |  |  |  |
| Pisani     | Surface Water                                |                                       | NA   | August 15, 2         |                | NA.              | NA               |            | NA   | NA         |         |  |  |  |  |
| - 150      | Industrial Well Water                        |                                       | NA   | August 15, 2         |                | NA.              | NA<br>NA         | NA         | NA NA  | NA.        |         |  |  |  |  |
|            |  |                                       |  |                      |                |                  |                  |            | Chloride, Bromide and Sulfate (Inorganic<br>Anions) – SW-846 9056A, Conductivity – SM<br>2510B, TDS – SM 2540C, Cations/metals –<br>SW-846 6010B, Carbonate & Bicarbonate<br>Alkalinity – SM 2320B, BTEX – SW-846 8260B,<br>TPH Fractions – TX 1006/LA 1006, and |            |         |  |  |  |  |
|            | MRAA Well Water                              |                                       | PMR  | August 15, 2         | 013            | NA               | NA               | GCAL       | Dissolved Gases - RSK-175, PAHs  | NA         |         |  |  |  |  |
|            | GP/ORW Water                                 |                                       | NA   | August 15, 2         | 013            | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
|            | Cavern Brine                                 |                                       | NA   | August 15, 2         | 013            | NA               | NA               | NA         | NA NA  | NA         |         |  |  |  |  |
|            | Geoprobe Wells                               |                                       | NA   | August 15, 2         | 013            | NA               | NA               | NA         | NA   | NA         |         |  |  |  |  |
|            |  |                                       |  |                      |                |                  |                  |            |  |            |         |  |  |  |  |
|            |  |                                       |  | Grand Bayou Well     | 3A             |                  |                  |            |  |            |         |  |  |  |  |
|            | Daily Operations at 3A                       | Summary of Today's events             |  |                      |                |                  |                  |            |  |            |         |  |  |  |  |
|            |  | Ovy 3A                                |  |                      |                |                  |                  |            |  |            |         |  |  |  |  |
|            | 8/16/2013                                    | 7am 622.73 8/16/2013                  |  |                      |                |                  |                  |            |  |            |         |  |  |  |  |
|            |  |                                       |  |                      |                | Relief           | Well #1          |            |  |            |         |  |  |  |  |
|            | 8/16/2013                                    |                                       |  |                      |                | See ORW-01 F     | lare Spreadsheet |            |  |            |         |  |  |  |  |
|            | -,,  |                                       |  |                      |                | 300 0 0111       | sp. caas./cct    |            |  |            |         |  |  |  |  |



### **Daily Action Summary**

### August 15, 2013

### **Stationary Air Monitoring**

- Bijeet Mukherjee onsite from 08:10 to 09:30. Changed out the monitors between 08:32 and 09:07. Collected data from the monitoring database and forwarded to Eric Rucinski in the Baton Rouge office for processing.
- Darlene McManus of Code Red (monitor sub-contractor) onsite from 07:00 to 17:00. Assisted in battery change outs and maintenance of the monitoring equipment.

NOTE: RTU-6 recorded elevated H<sub>2</sub>S readings while deployed at ST-1 on 08/15/2013 - 08/16/2013. RTU-2 replaced RTU-6 at 08:51 on 08/16/2013 and normal readings resumed. RTU-6 will not be re-deployed until inspected by the onsite technician and serviced as necessary. Additionally, RTU-1, located at TR-1, recorded one instantaneous elevated VOC reading at 13:44 on 08/15/2013. VOC readings before and after the one instantaneous record were 0 ppm.

### **Residential Air Monitoring**

• Sage has been requested to suspend bimonthly residential air monitoring. Therefore, Sage will discontinue these activities. The last event was conducted on March 26, 2013.

### **Gas Seep Sampling**

Not Scheduled

### **Well Gas Sampling**

• Well gas samples were collected from Geophone-1. Steve Shaughnessy started the scheduled well gas sampling at 07:24. Six samples were taken, each 10 seconds apart. Four samples were shipped to Isotech Laboratories in Illinois for isotopic analysis. Two samples were brought to Accutest to be transported to the SPL Louisiana laboratory for sulfur analysis.

### **Under Slab Gas Sampling**

Not Scheduled

### **Air Indoor Monitoring**

Not Scheduled



Geophone-1 Well Gas Sampling Location
August 15, 2013

SAGE
ENVIRONMENTAL CONSULTING

\*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

|                        | South-most Pipeline Site |           |           |         |        | Midd               | North-most Pipeline Site |         |        |          |           |           | So      | uth of OG3A | k-1       |           | Onsite Trailers |         |        |          |           |           |         |        |
|------------------------|--------------------------|-----------|-----------|---------|--------|--------------------|--------------------------|---------|--------|----------|-----------|-----------|---------|-------------|-----------|-----------|-----------------|---------|--------|----------|-----------|-----------|---------|--------|
|                        | ST-3                     |           |           |         |        | ST-2b              |                          |         |        |          | ST-1      |           |         |             |           |           | Pad #9          |         |        | TR-1     |           |           |         |        |
|                        |                          | Non-      |           |         |        | Non-               |                          |         |        |          | Non-      |           |         |             |           | Non-      |                 |         |        |          | Non-      |           |         | 1      |
|                        |                          | Methane   |           |         |        | Methane            |                          |         |        |          | Methane   |           |         |             |           | Methane   |                 |         |        |          | Methane   |           |         | l      |
| Date-Time *            | CO (ppm)                 | VOC (ppm) | H2S (ppm) | LEL (%) | O2 (%) | CO (ppm) VOC (ppm) | H2S (ppm)                | LEL (%) | O2 (%) | CO (ppm) | VOC (ppm) | H2S (ppm) | LEL (%) | O2 (%)      | SO2 (ppm) | VOC (ppm) | H2S (ppm)       | LEL (%) | O2 (%) | CO (ppm) | VOC (ppm) | H2S (ppm) | LEL (%) | O2 (%) |
| 08/15/2013 01:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.4   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 02:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.4   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 03:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.4   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 04:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.3   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 05:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.3   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 06:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.4   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 07:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.3   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 08:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 0.0                      | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.2   | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 09:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | <1.0 0.0           | 1.4                      | 0.0     | 20.9   | <1.0     | <1.0      | 6.2       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 20.9   | 0.0      | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 10:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.5                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.6       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 20.9   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 11:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.5                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.8       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 20.9   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 12:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.5                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.9       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 20.9   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 01:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.5                      | 0.0     | 20.9   | <1.0     | 0.0       | 6.8       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.1   | 0.0      | 6.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 02:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.5                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.8       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 20.9   | 0.0      | <1.0      | <1.0      | 0.0     | 20.9   |
| 08/15/2013 03:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.5                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.7       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.1   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 04:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.4                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.8       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 20.9   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 05:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.4                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.7       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.0   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 06:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.4                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.6       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.2   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 07:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.4                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.4       | 0.0     | 20.9        | 0.0       | 0.0       | 0.0             | 0.0     | 21.3   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 08:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.4                      | 0.0     | 20.9   | 0.0      | 0.0       | 6.3       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.3   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 09:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.4                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.2       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.3   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 10:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.4                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.1       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.2   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 11:00:00 PM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0 0.0            | 1.4                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.1       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.2   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/16/2013 12:00:00 AM | 0.0                      | 0.0       | 0.0       | 0.0     | 20.9   | 0.0                | 1.4                      | 0.0     | 20.9   | 0.0      | <1.0      | 6.1       | 0.0     | 20.9        | 0.0       | 0.0       | <1.0            | 0.0     | 21.2   | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |

Notes:
RTU-6 recorded elevated H2S readings while deployed at ST-1 on 08/15/2013 - 08/16/2013. RTU-2 replaced RTU-6 at 08:51 on 08/16/2013 and normal readings resumed. RTU-6 will not be re-deployed until inspected by the onsite technician and serviced as necessary. RTU-1, located at TR-1, recorded one instantaneous elevated VOC reading at 13:44 on 08/15/2013. VOC readings before and after the one instantaneous record were 0 ppm.

\*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

|                        |          | South     | h-most Pipelii | ne Site |        | Middle-most Pipeline Site |           |           |         |        |          | North     | n-most Pipelin | e Site  |        |           | Sc        | outh of OG3A | -1      | Onsite Trailers |          |           |           |         |        |
|------------------------|----------|-----------|----------------|---------|--------|---------------------------|-----------|-----------|---------|--------|----------|-----------|----------------|---------|--------|-----------|-----------|--------------|---------|-----------------|----------|-----------|-----------|---------|--------|
|                        | ST-3     |           |                |         |        | ST-2b                     |           |           |         | ST-1   |          |           |                |         |        |           | Pad #9    |              |         | TR-1            |          |           |           |         |        |
|                        |          | Non-      |                |         |        |                           | Non-      |           |         |        |          | Non-      |                |         |        |           | Non-      |              |         |                 |          | Non-      |           |         | 1      |
|                        |          | Methane   |                |         |        |                           | Methane   |           |         |        |          | Methane   |                |         |        |           | Methane   |              |         |                 |          | Methane   |           |         | ı      |
| Date-Time *            | CO (ppm) | VOC (ppm) | H2S (ppm)      | LEL (%) | O2 (%) | CO (ppm)                  | VOC (ppm) | H2S (ppm) | LEL (%) | O2 (%) | CO (ppm) | VOC (ppm) | H2S (ppm)      | LEL (%) | O2 (%) | SO2 (ppm) | VOC (ppm) | H2S (ppm)    | LEL (%) | O2 (%)          | CO (ppm) | VOC (ppm) | H2S (ppm) | LEL (%) | O2 (%) |
| 08/15/2013 05:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 0.0       | 0.0     | 20.9   | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.3            | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 06:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 0.0       | 0.0     | 20.9   | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.4            | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 07:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 0.0       | 0.0     | 20.9   | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.3            | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 08:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 0.0       | 0.0     | 20.9   | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.2            | <1.0     | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 09:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | <1.0                      | 0.0       | 1.4       | 0.0     | 20.9   | <1.0     | <1.0      | 6.2            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 20.9            | 0.0      | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/15/2013 10:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | 0.0      | <1.0      | 6.6            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 20.9            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 11:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | 0.0      | <1.0      | 6.8            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 20.9            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 12:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | 0.0      | 0.0       | 6.9            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 20.9            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 01:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | <1.0     | 0.0       | 6.8            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.1            | 0.0      | 6.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 02:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | 0.0      | 0.0       | 6.8            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 20.9            | 0.0      | <1.0      | <1.0      | 0.0     | 20.9   |
| 08/15/2013 03:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.5       | 0.0     | 20.9   | 0.0      | 0.0       | 6.7            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.1            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 04:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | 0.0       | 6.8            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 20.9            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 05:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | 0.0       | 6.7            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.0            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 06:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | 0.0       | 6.6            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 07:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | 0.0       | 6.4            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.3            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 08:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | 0.0       | 6.3            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.3            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 09:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.2            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.3            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 10:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.1            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/15/2013 11:00:00 PM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.1            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/16/2013 12:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.1            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/16/2013 01:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.3            | 0.0      | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/16/2013 02:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.1            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/16/2013 03:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.0            | 0.0     | 20.9   | 0.0       | 0.0       | <1.0         | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |
| 08/16/2013 04:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.4       | 0.0     | 20.9   | 0.0      | <1.0      | 6.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.2            | 0.0      | 0.0       | 0.0       | 0.0     | 20.9   |
| 08/16/2013 05:00:00 AM | 0.0      | 0.0       | 0.0            | 0.0     | 20.9   | 0.0                       | 0.0       | 1.3       | 0.0     | 20.9   | 0.0      | <1.0      | 6.0            | 0.0     | 20.9   | 0.0       | 0.0       | 0.0          | 0.0     | 21.2            | 0.0      | 0.0       | <1.0      | 0.0     | 20.9   |

Notes:
RTU-6 recorded elevated H2S readings while deployed at ST-1 on 08/15/2013 - 08/16/2013. RTU-2 replaced RTU-6 at 08:51 on 08/16/2013 and normal readings resumed. RTU-6 will not be re-deployed until inspected by the onsite technician and serviced as necessary. RTU-1, located at TR-1, recorded one instantaneous elevated VOC reading at 13:44 on 08/15/2013. VOC readings before and after the one instantaneous record were 0 ppm.

### **ME&A Daily Action Summary**

August 15, 2013

### **Subsidence Survey:**

- Arrived @ 9:00 am
- Ran conventional level loop starting at TBM 2 which is a nail set in a power pole adjacent to the main roadway and OxyGeismar #2 well pad. Ran level loop through brine wells (1,2 & 3), water wells (1,2 & 3), TBM's, and the two brine storage tanks

### Sinkhole Perimeter/Hydrographic Survey:

• Sinkhole perimeter survey

## **Support Sinkhole Cleanup**

No Work Done

### Misc. Survey Work

- Settlement plate survey for containment berm, centerline survey of containment berm, and survey installed CPTs.
- Depart @ 4:00 pm

# Michael Pisani & Associates

# Texas Brine, L.L.C. Assumption Parish, Louisiana Daily Field Report

| Report By:       | MD % A                                  |           |             |               |             | W            | Date:         | 8/15/2013 | - |
|------------------|---|-----------|-------------|---------------|-------------|--------------|---------------|-----------|---|
| Company:         | MP&A                                    |           |             |               |             | vv           | /ork Order #  | 80-03     | - |
| Health and S     | Safety Meeting                          | V         | YES         |               | NO          |              |               |           |   |
| Weather:         | 92 F Overcast t                         | o partly  | cloudy      |               |             |              |               |           |   |
|                  | Personnel                               |           |             | Company       |             |              | Job Title     |           |   |
| Charles Trah     |   |           | MP&A        | 1 1           |             | Geologist    |               |           | - |
| Patrick Ritch    | nie                                     |           | MP&A        |               |             | Environmen   | tal Scientist |           | _ |
|                  |   |           |             |               |             |              |               |           | _ |
|                  |   |           |             |               |             |              |               |           | _ |
|                  |   |           |             |               |             | -            |               |           | - |
|                  |   |           |             |               |             |              |               |           | _ |
|                  |   |           |             |               |             |              |               |           | - |
| Site Acti        | vities: Star                            | rt Time   | 6:50        | End Time      | 16:00       |              |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
| <b>Equipment</b> |   | ic rig    | noly weter  | tonk          |             |              |               |           |   |
|                  |   | d steer   | poly water  | talik         |             |              |               |           |   |
|                  | Sid                                     | a steel   |             |               |             |              |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
| Daily Activi     |   | MDA       |             | 11            |             |              |               |           |   |
|                  | ratory samples fro<br>ng at MRAA-6S,    |           |             |               | ot MD A A   | 06C with Son | io Dia        |           |   |
|                  | 5-157' bgs at MR                        |           |             |               |             |              | -             | ontent)   |   |
| _                | set well at MRA                         |           | -           |               |             |              | -             |           |   |
| -                | 155-165' bgs.                           | ,         |             |               |             | rr           |               | 0         |   |
|                  | AA-6M with fres                         | h water   |             |               |             |              |               |           |   |
| _                | ssure and water le                      |           | _           |               |             |              |               |           |   |
| Conduct ove      | rsight of CBI me                        | asuring p | oressure an | d water level | at Geoprobe | e locations  |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
| Estimated tip    | me of completion                        | •         |             |               |             |              |               |           |   |
| On-going         | ine of completion                       | •         |             |               |             |              |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
| Proposed sc      |   |           |             |               |             |              |               |           |   |
|                  | situ monitoring of                      |           |             |               |             |              |               |           |   |
|                  | ter level for the ir                    |           |             |               | wells       |              |               |           |   |
| •                | ssure and water l                       |           | •           |               |             |              |               |           |   |
|                  | ratory samples fro<br>leo, measure bubb |           | idustriai w | ater wens     |             |              |               |           |   |
| Coscive, via     | .co, mousure out                        | 510 51105 |             |               |             |              |               |           |   |
|                  |   |           |             |               |             |              |               |           |   |
|                  | me of completion                        | :         |             |               |             |              |               |           |   |
| On-going         |   |           |             |               |             | ,            | Initiale      | DMD       |   |